REMARKS

The Final Office Action mailed June 23, 2009, has been received and reviewed. Claims 1, 2, 4, 13, 14 and 16 are pending in the subject application. All claims, claims 1, 2, 4, 13, 14 and 16, stand rejected under 35 U.S.C. § 103(a). In response, it is proposed that each of independent claims 1 and 13, and dependent claims 2 and 14, be amended as set forth herein. As such, upon entry of this Reply, the proposed amendments will become actual and entered amendments. Claims 1, 2, 4, 13, 14, and 16 will remain pending. It is submitted that no new matter has been added by way of the present proposed amendments. Reconsideration of the subject application is respectfully requested in view of the proposed amendments and the following remarks.

Support for Claim Amendments

Independent claims 1 and 13 have been amended herein to recite a clarification of the attributes of a user interface context. In particular, "the user interface context is configured to receive input from a user, to provide output to the user, and to maintain the context settings and the context dictionary." Support for these claim amendments may be found in the Specification, for example, at paragraphs [0006], [0029], and [0036], and at FIGS. 3-6, reference numerals 312 and 316.

In addition, independent claims 1 and 13, in light of the proposed amendments, now recite an expansion to the process of allowing for backward capability, which is invoked when the user interface context is not presently being accessed by a second thread. In particular, the expansion to the process involves the following inventive steps: "(a) allowing the request to access the user interface context received from the first thread;" "(b) updating a context record maintained by the first thread to reflect that access is allowed to the user interface context;" "(c) verifying that the first thread has obtained exclusive access to the user interface context by

checking the context record;" and "(d) temporarily assigning to the first thread the context settings and the context dictionary maintained by the user interface context while the first thread is operating within the user interface context," where "assigning comprises placing the context settings and the context dictionary within thread settings of the first thread upon accessing the user interface context," and where "settings of the context setting and dictionary information of the context dictionary are specified at a context level, rather than on a thread level." Support for these claim amendments may be found in the Specification, for example, at paragraphs [0009], [0010], [0029], and [0034] - [0036], and at FIGS. 3-6, reference numerals 312, 316, 510, 520, and 530.

In general, proposed amendments to the claimed subject matter are not "new matter" within meaning of 35 U.S.C. § 132, unless they disclose an invention, process, or apparatus not theretofore described. Further, if later-submitted material simply clarifies or completes prior disclosure, it cannot be treated as "new matter."[1] By disclosing in a patent application a device that inherently performs a function or has a property, operates according to a theory or has an advantage, "a patent application *necessarily discloses* that function, theory or advantage, even though it says nothing explicit concerning it" (emphasis added).[2] The application may later be amended to recite the function, theory or advantage without introducing prohibited new matter.[3] Accordingly, because these proposed amendments are explicitly discussed, and/or inherent to, the procedure for managing threads with respect to a user interface contex, as memorialized in the Detailed Description, the newly recited subject matter is encompassed by the scope of the Specification and does not constitute new matter.

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[1] *Triax Co. v Hartman Metal Fabricators, Inc.,* 479 F2d 951 (1973, CA2 NY); cert. denied, 94 S. Ct. 843 (1973).

[2] *See* MPEP § 2163.07; *In re Reynolds*, 443 F.2d 384 (CCPA 1971); *In re Smythe*, 480 F. 2d 1376 (CCPA 1973).

Rejections based on 35 U.S.C. § 103

A.) Applicable Authority

The teachings or suggestions to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure.[4] To establish a *prima facie* case of obviousness, all the claim limitations must be taught by the prior art.[5] When determining whether a claim limitation is taught, "All words in a claim must be considered in judging the patentability of that claim against the prior art."[6] Further, in establishing a *prima facie* case of obviousness, the initial burden is placed on the Examiner: "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references."[7]

B.) Obviousness Rejection based on the U.S. Patent No. 5,129,084 to Kelly Jr. et al., in view of U.S. Publication No. 2004/0133893 to Carbone et al.

Claims 1, 4, 13 and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,129,084 to Kelly Jr. et al. (hereinafter the "Kelly reference"), in view of U.S. Publication No. 2004/0133893 to Carbone et al. (hereinafter the "Carbone reference"). As the Kelly and the Carbone references, whether taken alone or in combination, fail to teach or suggest all of the features of each of the amended claims, the *prima facie* case of obviousness is overcome, as hereinafter set forth.

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[3] *See id.*
[4] *See* MPEP § 2143; *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).
[5] MPEP § 2143.03; *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974).
[6] MPEP § 2143.03; *In re Wilson*, 57 C.C.P.A. 1029, 1032 (1970).

Independent claims 1 and 13 relate to a method and executable computer-readable media, respectively, for allocating the access of threads to a "user interface context." It is proposed that claims 1 and 13 be amended to recite a clarification of the attributes of the user interface context. In particular, this clarification recites that "the user interface context is configured to receive input from a user, to provide output to the user, and to maintain the context settings and the context dictionary." In this way, a particular type of context is claimed (user interface context), which has at least the three recited attributes of being able to (a) receive input from a user, (b) provide output to the user, and (c) maintain the context settings and the context dictionary.

The Office concedes that the primary reference, Kelly, does not teach a context that is capable of containing context settings or a context dictionary.[8] Moreover, the Office concedes that the Kelly reference does not teach a context that is a "user interface context" that can provide output to a user and/or receive input from the user.[9] However, without citing to a reference to support the Kelly reference, the Office indicates that it is well know that processors supporting a context would have various features to support the use of such contexts. This statement is overbroad and could, potentially, be applied to any novel configuration of a context or to any inventive context-thread interactions. Accordingly, this generalized statement cannot alone support the Kelly reference to establish a proper *prima facie* case of obviousness.

Further, the Office asserts that the step of using the claimed "user interface context," which is capable of receiving input from a user and providing output to the user, to interact with a first thread and second thread is obvious. Specifically, the Office states that "It

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[7] *Ex parte Clapp*, 227 USPQ 972, 972 (Bd. Pat. App. & Inter. 1985); *see also* MPEP §706.02(j) and §2142.
[8] Office Action at pg. 3, § 5.
[9] *Id.* at §§ 6 and 7.

would have been obvious . . . that the user interface context is a resource since threads frequently require access to the user."[10] Yet, the Kelly reference does not even inherently consider a context, or resource, that operates similarly to the claimed "user interface context." Moreover, the user interface context does not function as suggested by the Office (providing threads access to the user). In contrast, it is the claimed context itself that interacts with the user by receiving input and providing output.

Rather than pointing to specific information in the primary reference, Kelly, or other cited art that suggests the attributes of the user interface context described above, the Office has supplemented these features *sua sponte*. Nowhere does the Office particularly identify any suggestion or teaching, such as the identification of the relevant art, the level of ordinary skill in the art, the nature of the problem to be solved, or any other factual findings that might serve to support a proper obviousness analysis.[11] Because no specific art or documentary evidence is referenced to support this assertion, the Office has taken "Official Notice" and based the § 103(a) rejection on general skill in the art.

A prior art rejection should be based on an actual prior art reference while relying on Official Notice only where the facts asserted are well-known or of common knowledge in the art.[12] "[Facts asserted by official notice unsupported by documentary evidence] should be of notorious character and serve only to 'fill in the gaps' in an insubstantial manner which might exist in the evidentiary showing made by the examiner to support a particular ground for

[10] *Id.*
[11] *See, e.g., Pro-Mold & Tool*, 75 F.3d 1568, 1573 (Fed. Cir. 1996).
[12] MPEP § 2144.02(A); *In re Ahlert*, 424 F.2d 1088, 1091 (CCPA 1970) (finding that notice of facts beyond the record which may be taken by the Examiner must be "capable of such instant and unquestionable demonstration as to defy dispute").

rejection."[13] "It is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record as the principal evidence upon which a rejection was based."[14]

The present Office Action relies solely on Official Notice of alleged common knowledge in the art as the principal evidence that, when combined with the Kelly reference, forms the basis of the 35 U.S.C. § 103(a) rejections. This reliance is improper as it is used as a basis for the rejection and is not based on facts that are so well-known that they are "capable of instant and unquestionable demonstration as being well-known."[15] *A fortiori*, assertions of technical facts in areas of esoteric technology (*e.g.*, a user interface context that maintains context settings and a context dictionary for assigning data to a thread currently operating on an object associated therewith) must always be supported by citation to some reference work recognized as standard in the pertinent art.[16] Accordingly, Applicants expressly reserve the right to request that the Examiner produce a citation to a prior art reference to support each of the 35 U.S.C. § 103 rejections.[17]

In this instance, the Office has not set forth the proper foundation for an Official Notice, nor established that using a "user interface context" in the claimed method steps is well-known to a person of ordinary skill in the art, or may be recognized as inherent to the system of Kelly. As such, the asserted general conclusion concerning what is common knowledge to one of ordinary skill in the art without some concrete evidence in the record to support this finding will not support an obviousness rejection.[18] Accordingly, the Office's assertion of Official Notice is considered traversed pursuant to MPEP § 2144.03(D).

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[13] MPEP § 2144.03(E).
[14] *Id.*
[15] MPEP 2144.03(A).
[16] *Id.*
[17] 37 C.F.R. § 1.104(d)(2).
[18] MPEP § 2144.03(B); *In re Lee*, 277 F.3d 1338, 1344 (Fed. Cir. 2002).

Moreover, without demonstrating as obvious the use of the "user interface context" within the claimed method steps above (e.g., "temporarily assigning to the first thread the *context settings* and the *context dictionary* maintained by the *user interface context* while the first thread is operating within the *user interface context*"), the proposed combination offered by the Office does not meet the limitations of the claimed subject matter, and as a matter of law the Office's rejection cannot stand.

In addition, independent claims 1 and 13, in light of the proposed amendments, now recite an expansion to the process of allowing for backward capability, which is invoked when the user interface context is not presently being accessed by a second thread. In particular, the expansion to the process involves the following inventive steps: "(a) allowing the request to access the user interface context received from the first thread;" "(b) updating a context record maintained by the first thread to reflect that access is allowed to the user interface context;" "(c) verifying that the first thread has obtained exclusive access to the user interface context by checking the context record;" and "(d) temporarily assigning to the first thread the context settings and the context dictionary maintained by the user interface context while the first thread is operating within the user interface context," where "assigning comprises placing the context settings and the context dictionary within thread settings of the first thread upon accessing the user interface context," and where "settings of the context setting and dictionary information of the context dictionary are specified at a context level, rather than on a thread level." In this way, a context record is maintained by the thread operating in the user interface context, and the context record is manipulated and verified by the user interface context to ensure that access thereto is exclusive to a single thread.

The Office indicates that the primary reference, Kelly, does not teach the steps of maintaining a context record associated with a thread, or checking the context record to determine if it matches a context being accessed.[19] However, the Office relies on U.S. Patent No. 6,293,712 to Coutant (hereinafter the "Coutant reference") to support the Kelly reference. The Coutant reference does not describe either "(b) updating a context record maintained by the first thread to reflect that access is allowed to the user interface context," or "(c) verifying that the first thread has obtained exclusive access to the user interface context by checking the context record." Instead, the Coutant reference describes unwinding a call stack one stack frame at a time to help reconstruct a "context record" that describes the process (or thread) state in the most recent procedure activation at the point of interruption.[20] Although Coutant states the phrase "context record," the Coutant reference does not disclose that the context record is being used to ensure that a context is being exclusively accessed by one thread at a time. Moreover, the Coutant reference does not describe the steps of updating a context record to reflect access to a context (step (b)), or verifying exclusive access is obtained by checking the context record (step (c)).

The Carbone reference, as cited, does not teach steps (b) and (c) discussed above. Instead, the Carbone reference is used by the Office to teach the use of thread level environmental variables. As such, the Kelly, the Coutant, and the Carbone references, whether taken alone or in combination, fail to teach or suggest the steps (b) and (c) of each of the independent claims and, accordingly, the *prima facie* case of obviousness is overcome, as hereinafter set forth.

[19] Office Action at pg. 5, ll. 1-9.
[20] *See Coutant reference* at col. 5, ll. 50-60.

As the combination of the Kelly, Coutant, and Carbone references fails to teach or suggest all of the limitations of the amended claims, Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of independent claims 1 and 13, as amended, be withdrawn. Each of claims 4 and 16 depend, either directly or indirectly, from independent claims 1 and 13, respectively. As such, these dependent claims are believed to be in condition for allowance at least by virtue of their dependency.[21] Consequently, allowance of each of claims 1, 4, 13, and 16 is respectfully requested.

Further, claims 1 and 13, as amended herein, recite the process to allow for backward compatibility, where the process includes the step of "temporarily assigning to the first thread the *context settings* and the *context dictionary* maintained by the user interface context *while the first thread is operating within the user interface context*, wherein assigning comprises placing the context settings and the context dictionary within thread settings of the first thread upon accessing the user interface context, and wherein *settings of the context settings and dictionary information of the context dictionary are specified at a context level, rather than on a thread level*" (emphasis added). In this way, both the context settings and the context dictionary are imported to the thread settings of the first thread while operating in the user interface context. Advantageously, by using the context settings and the dictionary setting of the user interface context as the thread settings of the first thread (as opposed to maintaining the thread settings at a thread level), additional services are provided at the user interface context (e.g., catching exceptions caused by the thread 510 (see FIG. 6) while executing within the context 310).[22]

The Office indicates that the primary reference, Kelly, does not teach applying context settings in place of the thread settings of any thread accessing the user interface

[21] *See* 37 C.F.R. § 1.75(c) (2006).
[22] Specification at ¶ [0036].

context.[23] However, the Office cites to the Carbone reference to support the Kelly reference in this aspect. Yet, the Carbone reference does not describe (a) assigning context settings and a context dictionary (maintained by the user interface context) to a first thread (while the first thread is operating within the user interface context), or (b) placing the context settings and the context dictionary within thread settings of the first thread, where settings of the context settings and dictionary information of the context dictionary are specified at a context level, rather than on a thread level. In contrast, the Carbone reference describes a process of modifying or customizing the dynamic behavior of programs by using thread-level environment variables (as opposed to the context-level variables as claimed).[24] These thread-level environment variables of Carbone differ in function from the claimed context-level variables (context settings and context dictionary) in a variety of ways.

For instance, the thread-level environment variables are created upon the issuance of a request and destroyed upon termination of the subject thread.[25] In contrast, the claimed context-level variables are applied to the thread settings of the first thread and then applied to the thread settings of the subsequent threads, thus, the claimed context-level variables are not destroyed upon the termination of the first thread.

In another instance, the thread-level environment variables operate to "set the value of an existing environment variable [or context]."[26] In contrast, the claimed context-level variables are persistently maintained at the context and used to set values of the first thread. This particular example clearly flushes out the difference between the usage of the thread-level environment variables of Carbone and the claimed context-level variables, thus, delineating the

[23] Office Action at pg. 3, ll. 16-18.
[24] *See Carbone reference* at pg. 1, ¶ [0004].
[25] *Id.* at pg. 1, ¶ [0010].
[26] *Id.* at pg. 1, ¶ [0008].

distinctions between the disclosed material of Carbone and the elements of the amended claims 1 and 18. Further, it is contended by the Applicants that the Coutant reference fails to cure these deficiencies of the Kelly and Carbone references. As such, for at least these reasons, the Applicants respectfully request that the 35 U.S.C. § 103(a) rejection of independent claims 1 and 13, as amended, be withdrawn, and that of each of claims 1, 4, 13, and 16 be allowed.

C.) Obviousness Rejection Based on the U.S. Patent No. 5,129,084 to Kelly Jr. et al., in view of U.S. U.S. Publication No. 2004/0133893 to Carbone et al., in further view of U.S. Patent No. 6,293,712 to Coutant

Claim 2 and 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly and Carbone in further view of U.S. Patent No. 6,293,712 to Coutant, (hereinafter the "Coutant reference"). Each of claims 2 and 14 depends, either directly or indirectly, from independent claims 1 or 13 and, accordingly, it is respectfully submitted that the Kelly reference, the Carbone reference, and the Coutant reference, whether taken alone or in combination, fail to teach or suggest all of the limitations of these claims for at least the above-cited reasons. As such, withdrawal of the 35 U.S.C. §103(a) rejections of claims 2 and 14 is respectfully requested. Each of claims 2 and 14 is believed to be in condition for allowance and such favorable action is respectfully requested.

CONCLUSION

For at least the reasons stated above, upon entry of the proposed amendments, it is believed that claims 1, 2, 4, 13, 14, and 16 will be in condition for allowance. As such, Applicants respectfully request entry of the proposed amendments, withdrawal of the pending rejections and allowance of the claims. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned – 816-474-6550 or btabor@shb.com (such communication via email is herein expressly granted) – to resolve the same. It is believed that no fee is due, however, the Commissioner is hereby authorized to charge any amount required to Deposit Account No. 19-2112, referencing attorney docket number MFCP.110237.

Respectfully submitted,

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